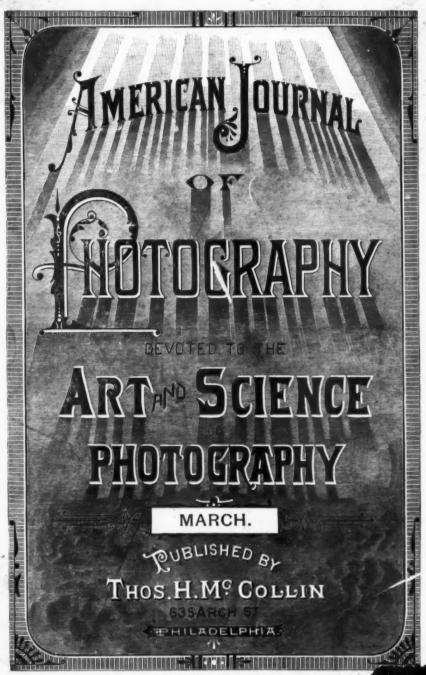
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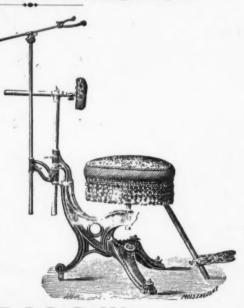
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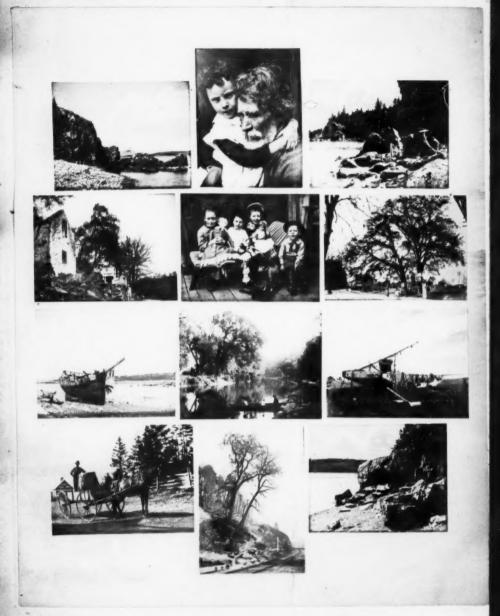


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STUDIES WITH THE PETITE GAMERA.
By Xanthus Smith, Philadelphia.

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AMERICAN

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THE PETITE CAMERA.

BY XANTHUS SMITH.

Early last summer I determined to purchase one of those dainty little cameras of the quarter size, namely 3½ x 4½ inches, made by the American Optical Co., and known as the "Petite" camera. My object was to have a light outfit, which I could so conveniently carry that I would be induced to take it with me on many excursions when it would be impracticable to have along the more bulky apparatus of the larger sizes.

Having got the box I was somewhat at a loss to know what to do about a lens, for the No. 1 Darlot rectilinear lens, which would have been a very suitable one to have adapted to it for general use, was a more expensive one than I cared to be carrying about constantly; and happening to mention my difficulty to Mr. Carbutt, he suggested that I should try the small size Darlot single view or landscape lens, which I at once set about procuring. It is a light, compact lens, with a ratchet movement for obtaining fine adjustment of focus, and furnished with three stops. Mr. Carbutt was so kind as to have the front of my camera cut and the lens properly secured in place, and a time being appointed when it would be ready, I stopped at Wayne and we sallied forth with a holder charged with two of his excellent B plates to give it a trial. Now, within a hundred vards of Mr. Carbutt's works there are standing two graceful spreading elm trees, which I constantly admired in passing on

the trains, but they are so close to the railroad bridge that I had never hoped to be able to photograph them, and especially upon so small a plate, so here was a chance at once for a test, and to my surprise and delight I found that we were able to take them in nicely on the focussing glass from the proper point of view. Two good negatives were the result. My first expedition with my little box was to a point some miles up the Schuylkill. Of my company that day were Mr. Carbutt and Mr. Clements, the latter an enthusiastic admirer of picturesque landscape scenery. The weather was perfection, one of those perfectly calm early summer days, when the foliage is not yet sufficiently dense to hide too much of picturesque stems and buildings, the reflections are perfect, and there is enough haziness to make exquisite atmospheric perspective. Leaving the more extended views to my friends, who were provided with larger outfits, I turned my attention to picturesque bits, and had a triumph in securing an old ruin with a graceful clump of trees, which was situated immediately over a canal lock, and had to be taken from so close a point of view, with the tripod balanced on the edge of the wooden bordering of the lock that the attempt seemed almost hopeless.

Turning my attention next to portrait and figure groups, I had equally good success as with the landscape, for while I had to focus so close to the subjects to cover the plate sufficiently that the amount of fine detail given was remarkable, even to the separate hairs and texture of the skin, I was surprised to find the distortion comparatively small where anything like a proper amount of care was used in the posing or grouping.

About the middle of August I set off

upon my sketching trip to Mount Desert. It had not been my custom before to take photographic apparatus with me, not wishing to have my attention diverted from my main object, the making of painted studies, but my "Petite" camera, with plate holders charged, was so light and compact that I found it could be easily carried along with my sketching apparatus. There was one drawback, however. My trunk had been so roughly used in the journey the previous summer, that a paint box, which had seen much service, though carefully packed, was so completely smashed to pieces that it is now laid away as a relic, the effects of baggage smashing, and my little camera, having become somewhat of a pet, I hesitated about subjecting it to such risk But my wife assured me that she would so pack it that there would be no danger, and, sure enough, it made the journey both ways all intact, and without a scratch, though the side of the case that contained it was burst through. I will mention a device which I hit upon to prevent being encumbered with a tripod on the journey. Some twenty-five years ago, I had made a tripod for carrying about, the top of which consisted of a round block of wood an inch and a half thick and six inches in diameter. Three slots were cut in the bottom of this, and staples driven so that when the legs, which had a hole through the top, were inserted in the slots, a stout wire could he pushed through the staples and holes, thus securing the legs to the cap and allowing them to be folded or spread at will. Now, I simply withdrew these wires, put the cap in my trunk, and, leaving the legs at home, supplied their place upon my arrival at South West Harbor, by three clean, straight, prettily tapering tops of young larches, plenty of which are cut and lying around well seasoned. This apparatus answered both for tripod and easel, and on mountain rambles the sticks answered as Alpenstocks for myself and those in company

During my trip I picked up a number of interesting bits, which I would have missed had I taken a larger sized camera with me, which would have been too cumbersome

for long walks and boating expeditions. And I will here say to the credit of this American Optical Co.'s camera, that I often used it in such windy weather, the subjects taken being rocks or boats on the beach, that I had to dispense with the focussing cloth while exposing, and although the slide was drawn and returned, in full exposure to sunshine, so neatly and thoroughly is all constructed that I did not have a single plate light struck. I took with me Carbutt's B plates, did all my developing after my return to Philadelphia, and only lost one plate, the failure of this being caused by withdrawing the slide while the cap was off the lens.

A few samples of the numerous bits collected during the past year are given as an illustration to the present number of the Journal, and as it is a comparatively easy matter to make enlargements of such negatives, as explained in an excellent paper by Mr. Croughton, read before the Philadelphia Photographic Society at their last meeting, what more suitable companion could the artist or scientific man have either at home or upon his summer rambles than a "Petite Camera."

EXPERIENCE WITH PERMANENT BROMIDE PAPER.

BY WILLIAM H. RAU.

The recent improvements in the application of Gelatine Bromide of Silver to paper seems to forecast a practical advance in the direction of photographic printing, and the day may come when the old method with albumen paper may find itself consigned to the same position occupied at present by collodion, good in itself, but only to be called forth on certain special occasions.

As its importance is becoming more and more widely known, perhaps a few hints from one who has had considerable experience in its use may be of interest to those who are just beginning to employ it.

There are three classes of negatives which the practical worker has to encounter.

1st. Weak and thin negatives.

2d. Strong and dense negatives.

3d. Medium soft brilliant negatives full of detail and beauty.

The permanent bromide paper, like everything else, gives the best results with the best negatives, but good prints may be obtained even from weak or strong negatives by certain modifications of the developer. This certainly is an advantage over the platinum print where, unless the negative is of a certain quality, no good results can be expected to follow. A good rich print in platinum from a thin, weak negative is an impossibility.

As regards negatives, be very careful to dust them thoroughly, and above all clean the backs from streaks and finger marks. There is no excuse for stains on the print resulting from such carelessness. The time of exposure will, of course, vary with the negative.

A very good plan is to have a standard light; it may be either an oil lamp or a gas jet, but must give an uniform and constant flame at all times. The distance the frame is held from the flame must also not vary.

It would of course be impossible to give any definite time for exposure, but a general idea may be had when we say that with an ordinary medium negative held 24 inches from the flame of a bat's wing burner, an exposure of 6 to 8 seconds is sufficient. But a standard can only be determined, and the intensity of the light settled by a few trials for normal exposure.

After exposing the paper under the negative, the next step is the development.

We take a saturated solution of Oxalate of Potassa, and a saturated solution of Proto Sulphate of Iron, and acidify both with Sulphuric Acid, and mix them in the following proportions according to the nature of the negative.

For weak, thin negatives use 1 part of Iron to 4 parts of Oxalate.

For dense negatives, 1 part of Iron to 8 parts of Oxalate.

For medium negatives, 1 part of Iron to 6 parts of Oxalate.

Be sure, after the two solutions are mixed in the proportions you desire, to test for acid, for the acid keeps the paper from turning yellow, and gives rich black tones.

Otherwise, dingy grey unpleasant tones will result.

Take a perfectly clean dish (cleanliness is of the utmost importance, if possible it is better to have special dishes which are used only for this purpose) and having nearly filled it with clear water, immerse the prints in it until the gelatine swells; then pour off the water and pour on the developer, and keep the dish in motion.

The image will soon begin to appear, if the negative has been properly timed, and gradually develope up to full strength.

Do not allow them to get too dense on the supposition that they will fix out in hypo like a plate, for the reduction is not very much.

When the prints are developed sufficiently pour off the developer, but before washing them pour over them a solution consisting of I drachm acetic acid to 16 oz water.

It is perhaps well to allow the clearing solution of acetic acid to act on the prints for a minute or two, then pour it off and add fresh, then wash in pure water and put in the hypo. We prefer a weak solution—I oz to 12 oz water.

If the print is intended for India ink work or for coloring in water colors, for which purpose it seems admirably adapted, it is best to place it in a solution of alum and water, then thoroughly wash.

Do not place the prints between sheets of bibulous paper, as is the custom in handling silver albumen prints, but hang them up in a clean place of moderate temperature to dry spontaneously. In handling bromide prints in any quantity, it will be found advantageous to employ two persons.

Make all the exposures first, and put them in the dish of water; take out a certain quantity just as you do when you tone silver prints—perhaps half a dozen at a time will be safe to handle in the developing dish; place them in the developer one at a time, otherwise they may develop unevenly. As they leave the developer put them in a dish of acetic acid and water.

One person can attend to these three operations; a second person will take them out of the acid and water, wash them and place them one by one in the hypo. dish. Be careful to keep the developing dish in

motion all the time, as well as the hypodish, turning the prints up and changing them constantly while in the hypo. It will require from three to five minutes to fix them.

From the hypo, they are removed to a washing tank. One hour's good washing is sufficient.

No toning is required or needed; for the tones, if the paper has been properly handled, are remarkably soft and harmonious.

Never use the same hypo for two batches of prints.

One gallon of solution will be sufficient for about fifty 6½ x 8½ or 8 x 10 prints

The permanent bromide paper is also admirable for enlargement in the camera or magic lantern.

We have not employed the latter, and shall therefore only speak of the former method.

Brilliant negatives, of course, here also give the best results.

The negative is placed in a frame so as to be illuminated by transmitted light in the same manner as in the making of lantern slides. We made use of an eight inch Ross Portable Symmetric lens and medium stop, and an 18 x 22 camera.

The time of exposure for ordinary negatives was found to average about ten minutes. The resulting enlargement was remarkably sharp and crisp, and could not be distinguished from a print made from a direct negative of that size.

In these very large sizes it will be found the best plan to handle only one print at a time, and let it pass through all the different operations. By this method we were not troubled with blisters.

At one time we were much annoyed with blisters in these large prints, and tried the salt after fixing, as recommended by the Eastman Co., but found that it gradually bleached the print until all disappeared, the weaker portions of the print going first. So, of course, we discontinued, but found that the acetic acid prevented their unpleasant appearance.

We may mention that we successfully reduced prints that were a little dense by use of Red Prussiate of Potassa and Hypo. solution, recommended by Mr. John Car-

butt for reducing gelatine negatives and albumen prints.

This reduction is often valuable in saving large prints (where the price is a consideration), but the results were never as good as those obtained by careful timing, etc.

Beautiful paper window transparencies may be made by taking the thin "A" paper and giving it about twice as much time as you would for an ordinary print, and developing it, looking through it until you perceive it has a little more density than normal.

We succeeded in getting some beautiful tones on certain prints which had been developed too far, by placing them after the regular fixing in a solution of hypo., which had been used for fixing collodion lantern slides. They were allowed to remain all night in the solution, and on being taken out and washed, were found to have those beautiful warm sepia tones so mach admired by artists.

Bromide paper possesses many advantages over silvered albumen paper. The operator is independent of time and weather, and the results produced are quite as artistic. People are beginning to appreciate the beauty of black and white tones, and we think they will soon have the preference, when their softness as secured in a well-made bromide print is compared with the ordinary tones on albumen paper, which custom has taught the public to accept as artistic.

We also think that the results are superior to those usually obtained with platinum.

The blacks are much better and richer, and a greater variety of tones is secured. Moreover, they are much easier of manipulation.

An excellent platinum print is only secured under the most favorable circumstances, but there is a wider scope in bromide printing.

There seems to be a tendency in the platinum print to turn yellow, owing to the difficulty of eliminating the iron, which thoroughly impregnates the paper in the hot solution to which it is subjected. So that the permanency of platinum prints is very doubtful.

The only drawback to the general application of bromide paper is its cost over silver albumen, but perhaps if the demand was increased the cost would be greatly diminished.

ON THE CHOICE OF A SUBJECT.

BY JOHN BARTLETT.

The choice of a suitable subject for representation by photography of what is called a composition or incident picture is a difficult task.

From the very necessity of the case, the picture must be what the artist designates as intensely realistic, and yet not vulgar or commonplace. Moreover, there must be a certain amount of mystery about it, if we may be allowed modestly to use such a word in photography, and a mystery which does not involve obscurity, needing a label tacked on to the subject, telling us, like the player in "Mid Summer Night's Dream" told the Duke Theseus:

"This lanthorn doth the horned moon present, Myself the man i' the moon doth seem to be."

We are willing to acknowledge the very narrow borders in which photography is confined in the exercise of the fancy or imagination; but do think that the quality of suggestiveness in a limited degree is not altogether shut out of her dominion.

It is out of our part to analyze what the imagination is; but merely for justice to realism we call attention to the fact that the elements which form the creations of the poet or painter, if examined, will be found to be in themselves intensely realistic, often familiar objects or incidents.

Shakespeare, in describing the effect of time on beauty and youth, says:

"When forty winters shall besiege thy brow, And dig deep trenches in thy beauty's field, Thy youth's proud livery so gazed on now Will be a tattered weed of small worth held."

What more realistic than besieging a city or digging trenches in a field? Yet who does not thrill at the beauty of the imagery.

But enough—we stray from our topic: the selection of a suitable subject for picture making by photography.

. What strikes one as a very good subject ture is going to will appear totally uninteresting to another. ture is going to inson's success.

"Concerning taste there's no disputing;" but we know that everybody, no matter what his taste may be, is attracted by anything which affords a certain amount of surprise or unexpectedness.

When any one looks at a painting or photograph, and sees at a glance just what the maker's ideas were in getting it up, we tell you plainly he does not rate that artist or photographer very highly.

No, he wants to study the picture, to find out something in it he cannot discover at the first sight.

To be sure, he lays all the credit of the discovery to his own intellectual superiority, but, depend upon it, he will not speak disparagingly of that artist's work.

Now, do you mean to say that a photograph cannot tell a story in such a way as to excite curiosity? What is to hinder it, supposing the possession of ability by the photographer

"To know what beauty is, see where it lies."

The picture you have in your mind may be translated by the camera, not as well, perhaps, as with the brush, nevertheless with a certain amount of gracefulness to make it pleasing; and if you can get your models into the spirit, the result is bound to be good.

How is it that H. P. Robinson and others secure such charming pictures? Of one fact be assured—you never find them attempting subjects transcending the limits of photography.

We are sometimes led to believe that the model helps these successful picture making photographers very much. But there is one thing: we very often start out with the intention of making a picture—oh, we are going to do something grand; but the truth is, we have no definite idea what it is going to be. It is an airy nothing, and never gets a local habitation or a name. If we ourselves have no definite conception of how we intend to construct the picture story, how can we inspire our patient models to act in harmony with us. No wonder they are stiff and awkward, and disgust us with their want of pliability.

I think the definiteness of what the picture is going to be is the lever of Mr. Robinson's success

A picture in which the models thoroughly enjoy the theme will have a certain amount of mystery in it which will always make it interesting. Your skill, of course, will be called forth by the introduction of something in harmony with the scene, not obtrusive, but in some way centering the interest.

A distinguished art critic said he could always tell the greatness of an artist by the manner in which he introduced a dog or a cat in a picture. With most artists puss too often looks as if she were in a strange garret.

Now, the question comes, how can this definiteness of pictorial intention be secured?

It cannot be secured at all unless the germ is in your mind, but there are ways of strengthening, of embodying the vague ideas.

First you want a subject, a name for your picture. We know of no better way than to read over a catalogue of pictures in the celebrated galleries of Europe, or even collections of pictures of any kind honored with titles.

Those of the Dutch and Flemish Schools of Painting, the Genre painters, as they are called, will be found very valuable; Terburg and Metsu, and Dow, and Peter Hooch and Jean Maes and a host of others.

These painters have devoted themselves to subjects

"Not too bright and good For human nature's daily food,"

and photography can look to them for inspiration and not be accused of aiming too high.

After you have formed definitely in your own mind, or sketched out on paper your ideas of what the subjects they have painted are like, try to get engravings or even coarse woodcuts of their methods of treatment, and modify yours accordingly, but do not copy slavishly.

You will be surprised how your own thought-out ideas and the hints you get from the cuts will enable you to build up a new and delightful picture. You will get hints about arranging the drapery, the best use of accessories, etc., for happily these Dutch painters of the drama of everyday

life give us just such domestic scenes as we see every day. Our life is a little modified, of course, in costume, but needing scarcely any change in our own dress to make it as picturesque.

Another good way to get ideas is from the caricaturist. These artists are always free from affectation, and the most original of anybody.

Leech, Du Maurier and our own Arthur Frost are rich in fancy and highly suggestive.

It is possible to build up from stray ideas, you find even in the most ridiculous sketch a picture full of interest and not necessarily comic.

After you have the name and the idea what your subject shall present, a certain amount of tact is needed to build up the picture and to dispose of the various parts.

Let your models help you here also, only gently guide them, and be ready to improve on any suggestion chance may offer, remembering that originality after all is the ability of perceiving what escapes ordinary eyes.

Always make the character fit into the subject. There is a great mania just now for milk-maid pictures, harvest girls, etc.

If you intend making such a picture by photography, either get girls that are used to country life and manners to help you or try something else.

Do not try to make society belies with uncountry airs, handle hoes and rakes, or carry milk pails on their shoulders in a way anything but graceful.

If you cannot get the genuine milk maid—and what is to hinder you?—make use of your model for some more appropriate subject in which she is perfectly at home. City girls are just as picturesque in overskirts and flounces in the proper scenes as country girls with sun bonnets and aprons out in their native fields.

Millet, the French painter, by his honesty of purpose combined with good judgment in selection, convinced at least the French that there were beautiful subjects even in the life of the real peasant, and so there is in the real lady of fashion.

use of accessories, etc., for happily these Dutch painters of the drama of everyday not represent the little ones doing things which they never do. We have seen pictures of children playing jury in which they were dressed up like regular judges with wigs on, and real policemen, and have heard people call them real cute; but whoever saw children engaged in such sport?

If we photograph children at play let it be at play they actually engage in.

If any one will take the trouble (no, not the trouble, but the pleasure) to walk along the seashore, and watch the children at play, and their faces beaming with expression, he will find subjects enough for camera and pencil without inventing any unnatural ones. But you need not go to the seashore. Walk along our streets. Pictures or suggestions for pictures will meet you at every turn.

We have seen photographs representing well fed little girls of good families dressed up as beggar girls with tattered clothes and faces and hands made dirty by art, and bare feet which showed they had just escaped the imprisonment of silken stockings, and posed by all the rules of art. Yes, the British Journal Almanac has been guilty of giving us just such a picture in 1884.

Above all, no matter how great a moralist you may be, do not try to make poor photography teach a Sunday school class by pointing a moral and adorning a tale.

The ethics of Photography has yet to be written.

It is enough if you represent what you see, that is, if you have a faculty for seeing, conscientiously. The moral will follow of itself.

SLIDE MAKING WITH COLLODION EMULSION.

BY ELLERSLIE WALLACE.

It would be altogether unnecessary for us to commence an article upon this topic by an attempt to enumerate the values and uses of slides for the lantern and of transparent positives in general. We feel safe in taking it for granted that all who are interested in photography are also, *ipso facto*, interested in the subject of the glass positive.

For the benefit of those among our read- We have also seen, occasionally, most

ers who are at the beginning of their photographic studies, it may be well to mention that while a good lantern slide is a photographic transparent positive, it will by no means be true if we reverse the statement and say that any positive (of the proper size to slip into the lantern) is a good slide. Supposing that an operator became interested in general transparency making, it would be very natural for him to imagine that his results would do well when placed in the lantern. But unless he had gone through a little special schooling in this direction, we fear that he would be not a little disappointed when he came to make the experimentum crucis by comparing ordinary lantern slides with his own efforts. To put it in other words, there are whole hosts of excellent transparent positives-excellent that is from a merely photographic point of view, that are wretched failures when put in the lantern and projected upon the screen even with the most powerful light that modern science can give us.

A signal instance of the way in which transparencies that look very beautiful indeed when held in the hand or backed up with ground glass and hung in the window, break down in the lantern, is to be seen in the vast majority of transparent positives made on gelatine plates. This may seem like a startling assertion, and yet we are sure of its truth. Time after time we have had positives by the gelatine process handed to us, and so perfect did they appear in every respect that we could not repress an exclamation of surprise when we saw the same thrown upon the screen. Where was the brilliancy? The delicate half tone? The rich black shadow? The clear high light? All gone and obscured in a universal smudginess. We know of no better word to express the idea, or we should, of course, avoid such a term. But Imagine a fine image over we do not. which some opaque dirty fluid or heavy veil had been thrown, and you have the effect of much of the gelatine slide work that it has been our fortune to see.

We do not, however, condemn all efforts by the gelatine plate for this purpose. We have also seen, occasionally, most

excellent, nay, superb results in the form of lantern slides by the gelatine process. But truth compels us to say that they were generally mere "lucky hits," (and every practical photographer knows that there are such things) or else the successful results out of many scores of failures. We ourselves have repeatedly tried to make slides on the gelatine plate, and have never produced anything that was good in the lantern, although it might be as pretty as possible when held up to the sky. An article in our last number entitled "Gelatine Lantern Slides," alludes to this very matter, and we here wish to reiterate the truth of the statement. It would, indeed, be possible to make fine results on gelatine, but at what outlay and cost of time, experiment, money and patience? Let those controvert us who can be sure of developing plates in rotation with the same ease and success as we can on collodion, either wet or dry, or on collodion emulsion, washed or unwashed, or on albumen or collodio-albumen

We hope and trust that none of our readers will construe these remarks into an attack upon the gelatine plate. Had the latter proved its capabilities for slide making as it has for instantaneous photography we should be the very first to exult in the new success. But we confess to feeling keenly the regret that so many photographers who can make first-rate negatives deem slide making a troublesome and difficult undertaking, and send away their plate boxes to some one who makes a specialty of slide work. The whole fault and trouble here, we believe, to be with the gelatine plate, which. whatever its excellencies in other departments of photography, will but rarely produce a first-class slide. We believe this to be also the received opinion in England, at least amongst the great majority of photographers. Still another point: the article in our last number says "the best results in gelatine work are produced by making the slide rather thin, and then intensifying with, etc., etc.;" this is probably quite true, and if the intensification were done with mercury followed by cyanide of silver as there suggested, the slide would have fair claims to be considered permanent, but we speak

most positively when we say that we have seen numbers of slides, otherwise faultless, fade disastrously within a few months where the mercury had been followed by ammonia. In this particular case, the maker of the slides was a gentleman of our acquaintance, famed for his skill in manipulation, so that the failure had to be accredited to the process itself.

What, then, do we recommend for slide making? What process capable of affording first-class results? We answer either collodion, wet or dry, the latter when preserved with such substances as tannin or a mixture of tannin with gum arabic, sugar and gallic acid, or coffee with gum and sugar, or the gum gallic mixture made by adding a saturated solution of gallic acid to a very thick mucilage of pure gum arabic and rock candy. Any of these will give beautiful results. But as the amateur at the present day wants things to work quicker and with less trouble than what we have just mentioned, he will probably prefer a collodion emulsion, particularly the washed collodion emulsion. And he may be sure that once having secured a lot of good emulsion, the results will leave nothing to desire. Omitting for the present the question of the preparation of the emulsion (which is a most delicate and troublesome operation) let us suppose him to possess the article and to be about to make slides. The glass being cleaned by soaking a few hours in a weak nitric acid, then well washed and rubbed dry with clean tissue paper, he merely shakes a little "French chalk" in powder over the glass, and after rubbing it about with a tuft of cotton wool, polishes the surface of the glass with a chamois skin. A spirit lamp with a plate of iron over the top so as to diffuse the heat being ready, the plates are dusted off with a stiff brush, and the collodion emulsion flowed over. As soon as the film sets enough to take the impression of the finger, the plate is held over the hot iron plate and kept there until dry. which will not be more than a few seconds. plate is now ready for exposure either by contact with the negative or in the camera, if the negative be larger or smaller than the required size of slide.

The development is also a very simple and easy matter. Dry pyro., a saturated solution of carbonate of ammonia, and say a 60 grain solution of bromide of potassium, with an intensifier of 20 grains of nitrate silver, and 30 grains citric acid in 1 ounce of water, will be all the solutions required. except, of course, hypo for fixing. It would not be amiss to have a mercury intensifier (the formula given in our article on "Copying" last month answers perfectly) also in readiness. This latter should rather be regarded as a toning than as an intensifying application, for it alters the whole color of the image; nevertheless, it increases the intensity also-so much so, indeed, that care must be taken not to overdo the matter and obtain an image entirely too dense to serve well as a lantern slide.

We may now give a formula for the collodion emulsion, merely premising that it may either be flowed on the plate and the plate then washed in water and immersed in the preservative, or the emulsion may be poured out into a clean porcelain tray and allowed to evaporate to a leathery consistency, after which it is broken into small pieces and well washed with soft water and dried. The pellicle thus obtained is redissolved in equal parts of ether and alcohol in the proportion of, say, 18 grains to the ounce, and the plate then coated. In this case, a preservative either may or may not be applied. We feel that we cannot do better than to reproduce a formula recently given in the British Journal Almanac by the Editor, who is also the inventor of the

We also add formulæ for the preservatives before mentioned.

Collodio-Bromide Emulsion.—This is now generally recognized as capable of giving the very finest results obtainable, its only drawback being its comparative slowness for camera work, though with the formulæ we shall give here exposures of from three to ten minutes suffice, according to the density of the negative.

The formula we prefer is a comparatively slow one, even for collodio bromide. It is as follows:

Pyroxyline (not to	00	p	ои	rde	ery	60	gr	ains.
Ether, s. g. '720						5	fi.	ounces.
Alcohol, s. g. 820								6.6
Bromide of zinc						100	ura	uns.

Nitrate of silver \				
Alcohol 5				I fl ounce.
Hydrochloric acid		cr.	 20	2 minims

Soak the pyroxyline in the alcohol and add the ether; when dissolved allow the collodion to settle clear, or else filter under pressure. When perfectly clear add the bromide of zinc. Next dissolve the silver in a drachm and a half of distilled water by boiling in a small glass flask; and when dissolved add gradually the remaining ounce of alcohol, keeping the mixture hot in order to prevent precipitation of the crystals. Add the hot solution a little at a time to the collodion, shaking vigorously; rinse out the flask with a little of the emulsion; and, finally, add the hydrochloric acid. Set aside to "ripen" for a week; the emulsion will keep for a long time, and improve.

Plates are cleaned and polished with powdered tale, dusted and coated with emulsion, and allowed to set very thoroughly. They are then passed through three or four baths of distilled water, remaining two or three minutes in each, and are then immersed for five minutes in the following "preservative:"

Albumen The white of one egg. Strong infusion of coffee . 10 ounces.

The coffee is made by boiling half an ounce of coffee freshly ground in ten ounces of water; after cooling and filtering, the albumen is added, having been previously well beaten to a froth with half a drachm of ammonia. It is well shaken up with the coffee, and the mixture again filtered.

A pleasing purplish tone is given by adding to the above quantity of enulsion two grains of sulphate of quinine. The coffee preservative gives a rich, black brown. After removal from the preservative, the plates are drained on blotting-paper and placed in a drying cupboard, free from draught, to dry.

With regard to exposure; so much depends upon circumstances that only experiment can decide its duration. It is advisable, however, to expose fully and develop quickly with a well-restrained, but not necessarily weak, developer; this not only gives cleaner and softer images but a richer color. It must be borne in mind that collodien plates will not stand nearly so much ammonia as those of gelatine. The following method of development will answer—

Make these solutions:

						N	Vo.	. 1				
Alcohol											1	ounce.
Water			0								I	96
						N	lo.	2				
Pyro .	9		,								3	grains.
Acetate	0	f s	od	la							10	64
Water											1	ounce.
						N	lo.	3				
Bromide	e c	of	pol	tas	sit	ım			,		10	grains.
												ounce.

Liquor ammonia, 880, or better, a sat; solution of carb, ammonia . I drachm. Water 7 drachms.

The acetate of soda may be replaced by phosphate, tungstate, sulphite, borate, and many other substances, all of which produce a noticeable variation in the tone of the image.

The plate is first flooded with No. 1 to soften the film, and, after washing till the water flows smoothly over it, it is flooded with two drachms of No. 2, which is returned to the developing glass, and two minims of No. 3 and one minim of No. 4 added. Now proceed to pour the de veloper on to the plate again, and keep it in motion. The image should commence to appear in about thirty seconds-perhaps less-and will proceed with great regularity if properly exposed. If it flash out at once the exposure has been too long or the quantity of bromide too little. When all the detail is visible, and the image—of a thin, flat, pinkey brown—appears to be commencing to "bury" itself, add four minims of No. 4 and the same quantity of No. 3, and see that the bulk of the developer is kept up to two drachms by adding more of No. 2. This will rapidly bring up the density, which can be accurately judged by looking through the plate. Should there be a difficulty in getting sufficient density, or if from over-exposure the plate appear likely to prove flat, wash thoroughly and proceed to redevelop by means of-

			*		Ne	o.	I.			
Pyro .								*	3	grains,
Water									I	ounce.
					No	0.	2.			
										grains.
										minims.
Citric a	ac	id							30	grains.
Water								-	2	ounces.

To two drachms of No. 1 add two minims of No. 2, and apply to the plate until the desired effect is gained. A slight "touch" of silver intensification confers a crispness that is rarely gained with alkaline pyro. alone.

Fix with cyanide (twenty grains to the ounce), wash well, and the picture is ready for toning.

The toning may be performed by treating the plate with a very weak solution of chloride of gold-an old toning bath for prints answers well -until the desired color is obtained. But by far the best result is obtained by Mr. William Brooks's platinum method, to which we are indebted to him for the following particulars:

After thoroughly washing the fixed plate, immerse it in a weak solution of bichloride of platinum of a pale straw color, rendered slightly acid with nitric acid. A stock solution of the bichloride, six grains to the ounce, may be kept for strengthening the toning solution. action is gradual and well under control. The color changes from yellowish-brown to warm

colors to a warm black with cool grey halftones. When sufficiently toned wash well, dry, and varnish with clear lac varnish.

Gum Gallic Preservative:

Gum Arabic 20 grains. Rock candy 15 Pulverize and dissolve in 2 drachms of water. Just before use, add

Gallic acid 3 grains. Hot water 6 drachms.

Allow to cool before adding to the gum solu-

ion. I his shou	па	no	EE)e	Ke	pτ	OV	er		Filter.
Tannin										
Gum Arabic .										
Sugar									4	66
Water									1	66
Filter, and ad										
Gallic acid										
Alcohol									1	drachm.
This keeps in	def	ini	tel	y.						
Coffee (groun	d)								1/2	ounce.
Gum Arabic						0			3/2	6.6
Sugar									3/2	6.6

Water 12 ounces. Boil for ten minutes, and filter. This does not keep well.

Exhibition of the Photographic Society of Philadelphia, 1886.

BY JOHN C. BROWNE.

In the Photographic display at the Cennial Exhibition in 1876, which was largely composed of professional work, not a single picture, if we remember correctly, was shown made upon a gelatine film. Ninetenths of the work was wet collodion, with some collodion emulsion and a few prints from albumen negatives. Now all is changed. With a dozen exceptions all the prints are from gelatine glass negatives, and the principal portion of the exhibit the work of amateurs. Mention is made of glass negatives, as it is quite possible that at the next exhibition glass will give way to paper, which will be going back thirty years to the time of waxed paper negatives, but only retrograding in the material used for carrying the sensitive film, as gelatino-bromide of silver was unknown at that time as a photographic agent.

It is to be regretted that the committee having this exhibition in charge were obliged to rule out all professional porclaret, and then through a pleasing variety of traits, but their reasons tor so doing was manifestly for the best, as the space suitable for hanging was almost entirely taken up by the pictures offered for competition, and only at great expense could such an exhibit have been properly shown.

We notice this to account for the absence of that class of pictures, as it would have been a satisfaction to many to have witnessed the improvement in professional portrait work in the past ten years.

Among such a mass of material gathered from so many different portions of the globe, it is but natural that all the work should not appear to equal advantage. But as a whole, the exhibition may be classed as a most creditable one to all concerned.

In comparing the present exhibition with that of 1876, the question presents itself: Has there been an improvement in photography since that time? We answer decidedly, Yes. Which is abundantly proved by the admirable quality of the instantaneous views, groups, interiors and landscapes shown in 1886. There are some who still think that perfection has not yet been obtained in gelatine glass plates, and prefer on difficult subjects to use some other dry process or wet collodion plates. While inclined somewhat to this belief, the writer is not unmindful of what gelatine has accomplished, and expresses the hope that methods will be discovered that will obviate every difficulty in its manipulation. It is very gratifying to observe the improvements in composition to be seen in the pictures of the present exhibition. There was a time not far distant when the chemical parts of photography received the greatest atten-If, occasionally, pictorial effect intruded upon the plate it was welcomed but not particularly sought after.

Now, photographers are being educated to make artistic pictures. The knowledge cannot be acquired in a day, and all will not possess it in equal proportion, but every one who experiments with a camera has an opportunity to study and profit by such a display of pictures as we have witnessed.

There is one feature of this exhibition that shows how wide spread is the use of photography as an amusement.

Ladies have become interested in this charming entertainment, and have kindly

sent many excellent specimens of their work to assist in making the event a success.

It is not the purpose of this paper to describe any particular exhibit, or to attempt criticism. Every one who contributed, helped to make the exhibition attractive, and all deserve thanks for their interest in the undertaking.

In conclusion, we feel satisfied that those interested in photography will look back with pleasure to this exhibition as a most enjoyable occasion, and will profit by its many teachings.

THE OXY-HYDROGEN LANTERN.

BY FRANK BEMENT.

Read before the Photographic Society of Philadelphia, March 3d, 1886.

The first form of optical lantern, known as the "Magic Lantern," was invented by Athanasius Kircher. He used simply two double convex lenses, placing the picture between them, and having an adjustment for focussing on the front lens. The illumination was obtained from an ordinary argand lamp, with a concave reflector behind it.

In the year 1824, Drummond discovered the lime ball light, which was introduced in the solar microscope soon afterward. The solar microscope was formerly illuminated by the parallel rays of the sun, reflected through the lenses by a plane mirror. This instrument was fastened to a partition placed in the window, and so arranged that the mirror could be swung in any direction to suit the constantly changing direction of the sun's rays, and the whole apparatus operated from inside the room. There was much trouble experienced by those using the solar microscope, on account of the uncertainty of the weather and the necessity of operating in the daytime only.

After the Drummond light came into use all these troubles were overcome.

The optical lantern is the outgrowth of the gas microscope, and there is no end to the number of forms which have been constructed. While I do not propose to discuss any of the old forms, still I cannot overlook what, to me, is the best type. I have examined several of the English and French lanterns, and have failed to see any which are equal to those manufactured in this country.

The form of body which I prefer consists of a wooden box of some well seasoned wood, lined with sheet iron or tin. It is highly necessary that the metallic lining should be separated from the wood, leaving an air space so that there will be a circulation of fresh air constantly rising between them. I lay great stress on the air space, because I do not believe that any better non-conductor of heat for lantern purposes exists. Asbestos has been used as a non-conductor with more or less success, but I do not like it, except when placed between the upper and lower parts of a dissolving lantern. It is good in this case because the heat, which always rises, would affect the upper lantern and probably crack the wood, and even in this place it must be at least one inch thick to be of any service.

As I am only taking up the gas lantern, I will not go into any of the various sources of light except the gas jet. The easiest and safest jet is the oxy-calcium. It consists of a large alcohol flame, the combustion of which is greatly supported and intensified by burning oxygen gas with it. The alcohol flame is blown on a piece of lime by the force of the gas, which passes through a blow-pipe. The jet gives a fair light, in comparison about twice as bright as a good oil lamp. The next kind of jet is known as the oxy-hydro-calcium. This form uses both oxygen and hydrogen, but they do not mix until they reach the lime. The hydrogen gas takes the place of the alcohol in the oxy-calcium jet. There are two forms of the oxyhydro-calcium jet. In one the hydrogen is in a large flame, rising from a Bunsen burner, and is driven on the lime by the oxygen which comes from the blow-pipe, the two gases mix only at the point of ignition; this is known as the blow-over jet. The other form is what is known as the concentric jet. This one has apparently only one tube for the gases to pass through to the lime, but on closer examination it will be found that there are two tubes, one inside

the other—the outer one conveying the hydrogen, and a small inner tube through which the oxygen passes. Either of these jets gives a good light up to an eighteen feet circle.

The present, mixed or oxy-hydrogen, jet, developed from the old concentric jet, which was brought about by experimenting with shorter oxygen tubes, small portions of which were cut off at a time until the whole tube was removed, it being observed all the while, that the more the gases were mixed, the more intense the light became; and after this fact was established, the mixing chamber was added.

The mixed jet should be used with both gases under about an equal pressure. The reason for this is that if one gas had but a very slight pressure, the other gas might force it back, and the result would be a disagreeable snap and a disappearance of all light.

There are various forms of condensing lenses, two of the simplest of which I will try to explain. The first is the ordinary combination of two plano-convex lenses, giving about a three-inch focus. As the condensing lens is for the purpose of collecting the rays of light, it will be well to say something regarding its action. A convex lens acts exactly like a prism. The rays striking it are refracted toward its axis, and every ray falling on it is refracted more or less in proportion to the angle at which it strikes it. It is for this reason that I have always contended that the oil light will not give as good definition as the jet.

As light decreases as the square of the distance, it is sometimes desirable to have a condensing lens with a very short focus, so that the jet will be close to it. In this way a large quantity of divergent rays are collected and thrown on the picture, making the whole illumination much more intense. One of the great advantages of the triple condenser to the ordinary optical lantern is its adaptability to objectives of different foci. With it any objective can be used which has not less than four inches or more than ten inches focus, and if very long focus objectives are used, the middle lens can be removed, making an ordinary double condensing lens. The diameter of a condensing lens should be large enough to cover the three inch square opening which is generally used. Some operators prefer the five-inch lens, while many claim that it is an unnecessary expense, and use the four and one-half inch lens. There may be some advantage derived from the five inch lens, but it is trifling when only used for projecting lantern slides.

The subject of objectives is too lengthy to go into. A good objective should be perfectly rectilinear, und cut sharp all over the field; these two qualities are seldom obtained The question is often asked: Can I place my lantern back of the audience? This can be done in any reasonable proportioned room or hall. The image increases in proportion to the distance, i. e., if your lantern gives an eight feet picture at twenty feet from the screen it will give a sixteen feet picture at forty feet, and a twenty-four feet picture at sixty feet. If the ceiling is not high enough, an objective of longer focus must be used, so that the image will not be too large. The objectives used in our Academy of Music are what are known as "four-four, or whole plate tubes," which have about a ten and a half or eleven inch focus.

The first thing to be considered in operating the lantern is to see that all the lenses are perfectly clean. You next turn your attention to the lime; this is the most troublesome and annoying part of running a gas lantern. One can never buy limes twice alike, they are almost always too soft. But supposing that a good hard and round piece has been selected, it should be placed in the cup or holder and revolved to see that it clears the nipple of the jet all around, or, in other words, "runs true." It is best to blow through the jet to see that the tubes are free and contain no dirt; after this is ascertained, attach the rubber tubes to the cylinders or gas bags. Turn on slowly the hydrogen gas and heat the lime through, then turn on slowly the oxygen until the hydrogen is nearly all taken up, then increase both hydrogen and oxygen until the best light is obtained. This point is reached just before the jet commences to blow. After the jet is working properly, place a slide in the carrier, and

draw a focus; then remove both slide and carrier, leaving a plain disk of light on the screen. Now the jet must be adjusted so that the circle will be evenly lighted throughout, after which screw all movable parts fast, and the apparatus is ready for exhibiting.

In operating a dissolving lantern, the same operation is gone through with in both lanterns, the extra attachment being a dissolving key. In setting up a double lantern, one should be very careful that both of the disks exactly match each other, so that when dissolving, one picture will occupy the same space the previous one did.

THE PHOTOGRAPHIC SOCIETY OF PHILADELPHIA.

A stated meeting of the Society was held Wednesday evening, March 3d, 1886, with the President, Mr. Frederic Graff, in the chair.

The Executive Committee reported that the publishers of the following journals had kindly supplied certain missing numbers to the Society free of cost, viz.: Anthony's Photographic Bulletin, the Photographic Times, the St. Louis Photographer, the Amateur Photographer (of London), and the Scientific American. On motion, a vote of thanks for the donations was passed.

The Committee on Membership reported the election of Mr. Wm. H. Doering as an active membet.

The Exhibition Committee presented their report, giving a full account of their labors in connection with the Exhibition. A guarantee fund for the protection of the treasury was first raised, being subscribed to by seventeen members.

The Society being composed of both amateur and professional photographers, the work of both classes was admitted.

As the public have frequent opportunities at other exhibitions of variour kinds to see what can be done in the way of artistic work by professional portrait photographers, and as the room available was limited, it was thought best to exclude works of this class, it being especially desired to show what could be done in other branches of the art.

The rules and classification agreed upon were based largely upon those previously adopted by the Boston Society of Amateur

Photographers.

All pictures received were required to be entered in competition, and only such pictures were admitted as were in accordance with the rules and classifications adopted. This excluded pictures "for exhibition only," which otherwise might have crowded the other work and served mainly to advertise certain private interests.

Separate classes were provided for landscapes and marine work by professionals, and some classes were subdivided accord-

ing to size of plate used.

The total number of pictures entered was 1,752, of which 99 were lantern slides and about 29 transpariencies, leaving 1,624 pictures which occupied about 1,600 square feet of wall space.

The total number of exhibitors was 114; 45 of whom were members of the Society, 16 foreign, and 12 ladies.

Fifteen societies were represented, including seven English associations.

The best filled classes were those for landscapes by amateurs, which contained 526 entries; 202 "figure compositions" were entered, and 91 pictures by ladies.

Forty-five kinds or makes of plates were used, and twenty-three makes of lenses were represented.

The expense account showed a fair balance of profit to the credit of the Society.

As a final suggestion, the committee called attention to a plan which had been talked of by some of the members, that an arrangement be proposed to the New York and Boston Societies, that hereafter, instead of general exhibitions being held in all three of the cities each year, but one, in which all should take part, be held annually, the three Societies having it in charge by turns, each one every third year.

This, while not interfering with annual exhibitions by each Society, confined to work of its own members, would enable all three to unite each year in one grand exhibition, which would be more successful because of the united effort, and more interesting to the public in each city from not recurring too frequently. The prizes won

at these exhibitions would be more valuable, as all the best work of the country would be likely to meet in competition.

The report being accepted, a resolution was offered by Mr. John G. Bullock, and

carried, as follows.

"Resolved, That the Photographic Society of Philadelphia hereby agrees to hold a general exhibition of photographs once in three years only, provided that the Society of Amateur Photographers of New York, and the Boston Society of Amateur Photographers will make a similar agreement, with the object in view to unite our interests and improve our exhibitions thereby."

The Secretary was directed to communicate with the New York and Boston Societies on the subject.

The paper for the evening on the "Oxy-Hydrogen Lantern" was read by Mr. Frank Bement.

Mr. Frederic E. Ives showed a new form of optical lantern devised by him. It was remarkable principally for its compactness, being constructed to fold up and form its own carrying case, which is less than a quarter the size of the carrying case of the smallest oxy-hydrogen lantern now in the market. When set up for use it is a complete working lantern, having jet and lenses of the usual size and power, with all necessary adjustments.

One small trunk of 2½ cubic feet capacity will carry a pair of these lanterns, together with an extra pair of long-focus objectives, a dissolving key and connections, a pressure gauge, 150 lantern slides in regular grooved boxes, a large size ether saturator, the small box table on which the lanterns are operated, an assortment of tools, extra jets, limes, etc.

The small box table on which the lanterns are operated, and to which the dissolving key and ether saturator are attached, is made to fit the top of an oxygen cylinder, which, with a screen, completes the outfit for producing first-class dissolving views on the largest scale.

Mr. Nash, of Harrisburg, showed a most ingenious shutter, whose weight did not exceed one ounce. Though the principle could be adapted to any lens, the one

showed was intended for use with an ordinary single view lens, and in fact was constructed from a part of the lens itself. It worked directly back of the diaphram opening, setting itself automatically after each exposure. A fan-shaped piece of thin metal with an opening, was caused by pressure of a spring, to pass the opening of the lens. As soon as the opening was entirely uncovered, a second piece, actuated by the same pressure, covered the opening, and on relieving the pressure of the finger on the spring both fiew back to their original position, and were ready for the next exposure. The shutter could be adjusted for time exposures, and could also be arranged so that the cap could be used for making exposures when desirable.

Mr. Pancoast showed an album of views taken in India, which had been sent him recently by a friend.

Mr. Bartlett wished to know whether the increase in the detail in the dark portions of an under-timed plate is obtained through the action of the very diluted actinic light filtered through the ruby glass, as in the case of "preliminary exposure," or to the prolonged action of the developer itself. His uncertainty as to the cause followed some observations he had made of the accelerating action of light in calling forth the detail in the non-actinic colors, red and yellow.

He had exposed upon red, yellow and blue objects, giving only sufficient time to bring out the blue, and consequently found a falling off in the other colors. To accelerate their tardiness, he held the partially developed plate for a few seconds to the ruby flame, and found that detail began to appear which had refused to show itself in the developer. He next tried the effect of exposing very quickly to direct daylight under red and yellow glasses, with the same results, but he could not strike the exact homeopathic dose to effect his object without fogging.

He had somewhat better results on exposing an under-timed plate, before putting it in the developer, under the red and yellow glass, also to direct daylight by means of a rapid shutter and a very small opening in the blind.

Increase of detail always followed, but in every case there was more or less fog.

The only plates he had at the time were extremely sensitive. Perhaps a more scientific way of experimenting would be to subject the plate to the special rays of the spectrum, whose dilution of actinism can be better estimated than in the light admitted through colored glass.

In this connection Mr. Pancoast recalled an experience be had once had, in forcing out detail in a washed emulsion plate by holding it over a candle. He suggested that diluted actinism may have been the cause of increase of detail in this case.

Mr. Browne thought that the heat of the candle had more to do with it.

Mr. J. G. Bullock, referring to the discussion at the last meeting in regard to the permanence of prints on gelatine paper, read a letter from a maker of the paper, to whom he had written to inquire on what the claims of permanence were based.

The letter stated that a well washed print on gelatine paper is practically the same as a well washed negative, and equally permanent. Negatives are printed in the sun through long periods of time, and if thoroughly washed do not fade. They are different in this respect from an albumen print, which is liable to fade even when thoroughly washed. The elimination of hypo from gelatine is an easy matter compared with albumen which has been rendered insoluble. "We find no difficulty in washing emulsion in slabs a quarter of an inch thick; as compared with this, the washing of very thin films on paper is a short operation.

"As far as actual proof is concerned, gelatine paper has been in use only four or five years, and up to this time we have never heard any complaints. So far, both theory and experience uphold the claim that the prints are permanent."

Mr. Browne thought that enough time had not yet elapsed since gelatine was introduced for negatives or prints, to decide whether it was permanent. His experience dated back to about 1853; and, though he thought wet plates were as lasting as any, he doubted their absolute permanence.

It was suggested that intensification was,

in many cases, the cause of fading in both collodion and gelatine negatives.

In reply to a question as to the safest intensifier, cyanide of silver was recommended, and an experiment described in one of the recent journals was quoted in proof. An intensified negative was partly covered with several thicknesses of yellow paper and then exposed to the direct rays of the sun for the space of five months. On removal of the paper not the slightest difference could be seen between the two portions of the negative.

Mr. S. M. Fox thought one cause of fading after intensification was the repeated use of the same mercury solution, which gradually became contaminated with hypo from the plates upon which it had been used.

After a recess for a lantern exhibition, the meeting adjourned.

ROBERT S. REDFIELD, Secretary.

PICTURES RECEIVED.—We have received from W. H. Rau & Co., Philadelphia, a series of superb photographs, representing Niagara Falls and Watkin's Glen in their lovely winter dress.

The points of view from which the pictures of the Falls are taken give the best idea of the sublimity of the mighty waters, around which the frost has built up palace and dome and pyramid of ice. With an appreciation of the beautiful, this has been included in the pictures.

The rendering of the winter Flora, both here and in the views of Watkin's, presents perfectly the peculiar translucence of ice and hoar frost, and the light and flaky nature of untrodden snow.

The photographer must have climbed many a dangerous height to secure these views, but he has been amply repaid in the fine results both for his labor and risk.

FROM Messrs. Crosscup & West we have received a circular, from which we are glad to learn that they have recovered from the effect of the disastrous fire which overtook them on the night of the 25th of January. and are now located in their large building, 907 Filbert street, with new and improved apparatus, ready to fill all orders in the dif-

ferent methods of wood engraving, photoengraving and the celebrated Ives' process.

The circular is accompanied with two beautiful pictures illustrating the excellent results obtained by the Ives' Process—one from an original negative, and the other from a drawing by Will. H. Low, from "Keat's Lamia." The half tones and soft gradations of light and shade in both are secured with wonderful effect, and show the great value of the process as a means for illustration, and for accurately translating the original work of the artist's brush and pencil.

WITH sorrow we learn of the death of an honored member of the fraternity, Mr. Douglass Hovey. Mr. Hovey was born in 1828, in Hampton, Conn., and lived for a number of years in our city, engaged in the photographic business. At the time of his death, February 8th, he was a resident of Rochester, N. Y., being President of the American Albumen Paper Co.

He was a successful business man, widely known and much respected.

CLOSE upon this follows the sad news of the death of Mr. John A. Scholten, of St. Louis, a name intimately connected with the advance of artistic photography in this country.

The genial nature of Mr. Scholten and his high moral character, make his loss deeply felt by all who had the pleasure of knowing him.

We shall give our readers full particulars of the sad event when we receive further information.

"Camera, Field and Book" is the title of an interesting little monthly conducted with much literary ability, and published at Bristolville, Ohio.

It is devoted to Literature, Natural History and Science, every third number being entirely composed of photographic contributions.

It is now in its second year, which argues well for its popularity.

The articles are well selected, and the original matter good, while the price of subscription is extremely low.

WE regret that most of the reviews of the Exhibition of the Philadelphia Society, published in the different journals, were not sufficiently critical in their character to be of value.

Some were descriptive, some entertaining, some amusing, but few pointed out the rationale of the artistic effect displayed in many of the pictures, and none suggested the means by which improvements might have been secured. Criticism does not consist in universal fault-finding, nor indiscriminate praise, but in the just estimation of beauties and censure of defects.

Some of the reporters seemed only anxious to chronicle the name of every exhibitor for fear some one's feelings might be hurt by the omission.

Such items as Mr. —— showed seven landscapes, or Dr. So-and-So sent a frame of four pictures—surely cannot be very edifying to any one—even to Mr. —— or Dr. So-and-So.

ANOTHER word about the Exhibition. How few of the landscapes contained figures or groups. Many a lovely view was marred by a vacant stretch of barren foreground, which might have been occupied by figures to the great advantage of the picture. The skies were relieved from being "a blank of things" by artistically printing in clouds, but the foregrounds looked like "bare ruined choirs."

There was an excuse in the old collodion days for this absence of figures, but with rapid gelatine plates it cannot be admitted.

The views in which groups were introduced showed much artistic feeling, and there is no reason why the practice should not be more general, or why landscapes should not sometimes form the background to composition pictures.

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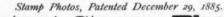
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1-Boat with foreground. Price \$9.50,	Lenses. 1—4x4 Darlot Portrait Lens, with Rack
will be sold for 4 50	and Pinion Movement and Central
I—Rustic Log, good as new 1 50	Stops. Very little used 25 00
1—Papier Mache, Fire Place and Cabinet combined, fair condition, 8 00	1-4x4 C. C. Harrison Portrait Lens, with
2—Papier Mache Pedestals and Bases,	Rack and Pinion Movement. No
good order, each 3 50	Central Stops 25 00
1-Papier Mache Winscoting, fair order, 3 50	I-5x8 Waterbury Lens 2 50
1-Universal Position Chair, Crimson	I-13x16 Harrison Globe Lens W 20 00
Torry; all Attachments except Baby	I—I-2 Size Quick-Acting Baby Lens 18 00 I—I-4 Size Darlot Gem Lens 3 00
Chair; good as new 30 00	1—11x14 C. C. Harrison, Central Stops. 35 00
1—Spencer Head-rest	I-Matched Pair Ross Symetrical Stereo
I—Floor Rug, 8x8 feet 10 00 I—Drapery 4 00	Lens, 41/2 in. focus. By using back
1—Drapery 6 00	combination only will cover 5 x 8
1—Stone Wall 2 50	plate full; will be sold singly or in
1-Rustic Stile in good condition. Price,	pair. Price each, \$25, per pair 45 00
new, \$8.00, will sell for 4 00	1-Matched pair German Stereoscopic
I-Centennial Camera Stand, in good	Lenses, in good order 15 00
condition	
1—10 inch Entrekin Eureka Burnisher . 12 50 2—Tall Head Rests, price each 2 00	I to inch Condensing Lense 15 00
2—Tali Head Rests, price each 2 00 1—Cross Baby Chair, almost new 4 00	* Matched Pair Imitation Dallmuor
I—Green Rep Position Chair, in fair con-	Lenses, per pair
dition, price, new, \$8.50, will sell for 4 00	1—Set, 4 ¼ size Gem Tubes in Brass
1—Childs Lounge	
I-10-inch Weston Burnisher 10 00	Madinum Madaniala
I-6-inch Entrekin Burnisher 6 oc	
Papier Mache Log, 2 feet long 2 oc	TAT A 377 NICO :
I—Papier Mache Rock, 45 in. high 7 or I—Papier Mache Balustrade 7 or 7 or	
1—Papier Mache Balustrade 7 00 1—8x10 Exterior Background, slightly	- 6
damaged 6 od	etc., I am prepared to supply all mate-
	rials at reduced rates.
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1-5x8 Tourist Outfit, including 5x8	ented.
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1-4x7½ Stereo Box (wet plate) and Plate Holder, fitted with a matched	635 ARCH STREET.
pair Zantmeyer Lenses 30 c	o oso Alich Silibbi.
1-61/2 x81/2 Portrait Box and Plate Hold-	DRAUGHTSMEN'S
er, fair condition 6 c	0
1-8x10 American Optical Co.'s Camera	sensitive paper.
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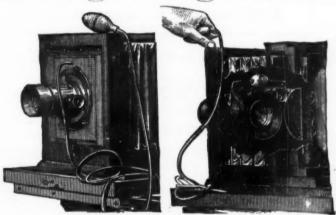
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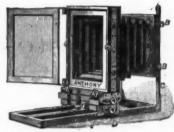
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